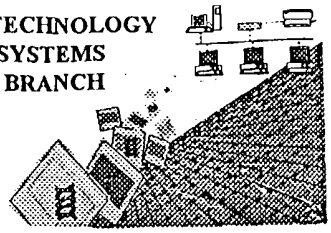
BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/787,219
Source: 1FWO
Date Processed by STIC: 7/30/04

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FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

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Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
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Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<**http://www.uspto.gov/ebc/efs/downloads/documents.htm**> , **EFS Submission User Manual** - ePAVE)
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Revised 05/17/04

IFWO

RAW SEQUENCE LISTING DATE: 07/30/2004
PATENT APPLICATION: **US/10/787,219** TIME: 11:40:38

Input Set : **A:\248628US0X.txt**
Output Set: **N:\CRF4\07302004\J787219.raw**

<110> APPLICANT: JESTIN, JEAN-LUC
VICHIER-GUERRE, SOPHIE
<120> TITLE OF INVENTION: METHODS FOR OBTAINING THERMOSTABLE ENZYMES, DNA POLYMERASE I VARIANTS FROM THERMUS AQUATICUS HAVING NEW CATALYTIC ACTIVITIES, METHODS FOR OBTAINING THE SAME, AND APPLICATIONS OF THE SAME
<130> FILE REFERENCE: 248628USOX
<140> CURRENT APPLICATION NUMBER: 10/787,219
<141> CURRENT FILING DATE: 2004-02-27
<160> NUMBER OF SEQ ID NOS: 61
<170> SOFTWARE: PatentIn version 3.3
<210> SEQ ID NO: 1
<211> LENGTH: 24
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetic DNA
<400> SEQUENCE: 1
taacaatagg ccggccaccc cttc 24
<210> SEQ ID NO: 2
<211> LENGTH: 18
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetic DNA
<400> SEQUENCE: 2
gagtttttgt tctgcggc 18
<210> SEQ ID NO: 3
<211> LENGTH: 27
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetic DNA
<400> SEQUENCE: 3
tttaatcatc tgcagtaccg ggagctc 27
<210> SEQ ID NO: 4
<211> LENGTH: 28
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Synthetic DNA
<400> SEQUENCE: 4
ttcattcttg ctagctcctg ggagaggc 28
<210> SEQ ID NO: 5

RAW SEQUENCE LISTING DATE: 07/30/2004
PATENT APPLICATION: **US/10/787,219** TIME: 11:40:38

Input Set : **A:\248628US0X.txt**
Output Set: **N:\CRF4\07302004\J787219.raw**

68 <211> LENGTH: 43
69 <212> TYPE: DNA
70 <213> ORGANISM: Artificial Sequence
72 <220> FEATURE:
73 <223> OTHER INFORMATION: Synthetic DNA
76 <220> FEATURE:
77 <221> NAME/KEY: misc_feature
78 <222> LOCATION: (15)..(15)
79 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
80 C and A, in the trimer sequence CAR and AVY, respectively
82 <220> FEATURE:
83 <221> NAME/KEY: misc_feature
84 <222> LOCATION: (16)..(16)
85 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
86 A and V, in the trimer sequence CAR and AVY, respectively
88 <220> FEATURE:
89 <221> NAME/KEY: misc_feature
90 <222> LOCATION: (17)..(17)
91 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
92 R and Y, in the trimer sequence CAR and AVY, respectively
94 <220> FEATURE:
95 <221> NAME/KEY: misc_feature
96 <222> LOCATION: (24)..(24)
97 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
98 C and A, in the trimer sequence CAR and AVY, respectively
100 <220> FEATURE:
101 <221> NAME/KEY: misc_feature
102 <222> LOCATION: (25)..(25)
103 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
104 A and R, in the trimer sequence CAR and AVY, respectively
106 <220> FEATURE:
107 <221> NAME/KEY: misc_feature
108 <222> LOCATION: (26)..(26)
109 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
110 R and Y, in the trimer sequence CAR and AVY, respectively
112 <400> SEQUENCE: 5
W--> 113 ccggccaccc cttcnnnctc aacnnncggg accagctgga aag **43**
116 <210> SEQ ID NO: 6
117 <211> LENGTH: 65
118 <212> TYPE: DNA
119 <213> ORGANISM: Artificial Sequence
121 <220> FEATURE:
122 <223> OTHER INFORMATION: Synthetic DNA
125 <220> FEATURE:
126 <221> NAME/KEY: misc_feature
127 <222> LOCATION: (17)..(17)
128 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative

abundance:

129 Y and R, in the trimer sequence YTG and RBT, respectively

131 <220> FEATURE:

RAW SEQUENCE LISTING DATE: 07/30/2004
PATENT APPLICATION: **US/10/787,219** TIME: 11:40:38

Input Set : **A:\248628US0X.txt**
Output Set: **N:\CRF4\07302004\J787219.raw**

132 <221> NAME/KEY: misc_feature
133 <222> LOCATION: (18)..(18)
134 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
135 T and B, in the trimer sequence YTG and RBT, respectively
137 <220> FEATURE:
138 <221> NAME/KEY: misc_feature
139 <222> LOCATION: (19)..(19)
140 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
141 G and T, in the trimer sequence YTG and RBT, respectively
143 <220> FEATURE:
144 <221> NAME/KEY: misc_feature
145 <222> LOCATION: (20)..(20)
146 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
147 Y and R, in the trimer sequence YTG and RBT, respectively
149 <220> FEATURE:
150 <221> NAME/KEY: misc_feature
151 <222> LOCATION: (21)..(21)
152 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
153 T and B, in the trimer sequence YTG and RBT, respectively
155 <220> FEATURE:
156 <221> NAME/KEY: misc_feature
157 <222> LOCATION: (22)..(22)
158 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
159 G and T, in the trimer sequence YTG and RBT, respectively
161 <220> FEATURE:
162 <221> NAME/KEY: misc_feature
163 <222> LOCATION: (26)..(26)
164 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
165 Y and R, in the trimer sequence YTG and RBT, respectively
167 <220> FEATURE:
168 <221> NAME/KEY: misc_feature
169 <222> LOCATION: (27)..(27)
170 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
171 T and B, in the trimer sequence YTG and RBT, respectively
173 <220> FEATURE:
174 <221> NAME/KEY: misc_feature
175 <222> LOCATION: (28)..(28)
176 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
177 G and T, in the trimer sequence YTG and RBT, respectively
179 <220> FEATURE:
180 <221> NAME/KEY: misc_feature
181 <222> LOCATION: (44)..(44)
182 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
183 Y and R, in the trimer sequence YTG and RBT, respectively

185 <220> FEATURE:
186 <221> NAME/KEY: misc_feature
187 <222> LOCATION: (45)..(45)
188 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
189 T and B, in the trimer sequence YTG and RBT, respectively

RAW SEQUENCE LISTING DATE: 07/30/2004
PATENT APPLICATION: **US/10/787,219** TIME: 11:40:38

Input Set : **A:\248628US0X.txt**
Output Set: **N:\CRF4\07302004\J787219.raw**

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     191 <220> FEATURE:
     192 <221> NAME/KEY: misc_feature
     193 <222> LOCATION: (46)..(46)
     194 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative
abundance:
     195       G and T, in the trimer sequence YTG and RBT, respectively
     197 <400> SEQUENCE: 6
W--> 198 ggatgaggtc cggcaannnn nnaatnnngg tgctcttcag cttnnngagc tcccggtact     60
     200 gcagg                                                               65
     203 <210> SEQ ID NO: 7
     204 <211> LENGTH: 62
     205 <212> TYPE: DNA
     206 <213> ORGANISM: Artificial Sequence
     208 <220> FEATURE:
     209 <223> OTHER INFORMATION: Synthetic DNA
     212 <220> FEATURE:
     213 <221> NAME/KEY: misc_feature
     214 <222> LOCATION: (17)..(17)
     215 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative
abundance:
     216       C and A, in the trimer sequence CAR and AVY, respectively
     218 <220> FEATURE:
     219 <221> NAME/KEY: misc_feature
     220 <222> LOCATION: (18)..(18)
     221 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative
abundance:
     222       A and V, in the trimer sequence CAR and AVY, respectively
     224 <220> FEATURE:
     225 <221> NAME/KEY: misc_feature
     226 <222> LOCATION: (19)..(19)
     227 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative
abundance:
     228       R and Y, in the trimer sequence CAR and AVY, respectively
     230 <220> FEATURE:
     231 <221> NAME/KEY: misc_feature
     232 <222> LOCATION: (32)..(32)
     233 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative
abundance:
     234       C and A, in the trimer sequence CAR and AVY, respectively
     236 <220> FEATURE:
     237 <221> NAME/KEY: misc_feature
     238 <222> LOCATION: (33)..(33)
     239 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative
abundance:
     240       A and V, in the trimer sequence CAR and AVY, respectively
     242 <220> FEATURE:
     243 <221> NAME/KEY: misc_feature
     244 <222> LOCATION: (34)..(34)
     245 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative
abundance:
     246       R and Y, in the trimer sequence CAR and AVY, respectively
     248 <220> FEATURE:
     249 <221> NAME/KEY: misc_feature
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250 <222> LOCATION: (41)..(41)
251 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
252 C and A, in the trimer sequence CAR and AVY, respectively

RAW SEQUENCE LISTING DATE: 07/30/2004
PATENT APPLICATION: **US/10/787,219** TIME: 11:40:38

Input Set : **A:\248628US0X.txt**
Output Set: **N:\CRF4\07302004\J787219.raw**

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     255 <221> NAME/KEY: misc_feature
     256 <222> LOCATION: (42)..(42)
     257 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative
abundance:
     258       A and V, in the trimer sequence CAR and AVY, respectively
     260 <220> FEATURE:
     261 <221> NAME/KEY: misc_feature
     262 <222> LOCATION: (43)..(43)
     263 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative
abundance:
     264       R and Y, in the trimer sequence CAR and AVY, respectively
     266 <400> SEQUENCE: 7
W--> 267 caaccagacg gccacgnnna cgggcaggct annnagctcc nnncccaacc tccagaacat     60
     269 cc                                                                  62
     272 <210> SEQ ID NO: 8
     273 <211> LENGTH: 43
     274 <212> TYPE: DNA
     275 <213> ORGANISM: Artificial Sequence
     277 <220> FEATURE:
     278 <223> OTHER INFORMATION: Synthetic DNA
     281 <220> FEATURE:
     282 <221> NAME/KEY: misc_feature
     283 <222> LOCATION: (14)..(14)
     284 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative
abundance:
     285       Y and R, in the trimer sequence YTG and RBT, respectively
     287 <220> FEATURE:
     288 <221> NAME/KEY: misc_feature
     289 <222> LOCATION: (15)..(15)
     290 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative
abundance:
     291       T and B, in the trimer sequence YTG and RBT, respectively
     293 <220> FEATURE:
     294 <221> NAME/KEY: misc_feature
     295 <222> LOCATION: (16)..(16)
     296 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative
abundance:
     297       G and T, in the trimer sequence YTG and RBT, respectively
     299 <220> FEATURE:
     300 <221> NAME/KEY: misc_feature
     301 <222> LOCATION: (23)..(23)
     302 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative
abundance:
     303       Y and R, in the trimer sequence YTG and RBT, respectively
     305 <220> FEATURE:
     306 <221> NAME/KEY: misc_feature
     307 <222> LOCATION: (24)..(24)
     308 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative
abundance:
     309       T and B, in the trimer sequence YTG and RBT, respectively
     311 <220> FEATURE:
     312 <221> NAME/KEY: misc_feature
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313 <222> LOCATION: (25)..(25)
314 <223> OTHER INFORMATION: n represents the following sequences in a 1:1 relative abundance:
315 G and T, in the trimer sequence YTG and RBT, respectively

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 07/30/2004
PATENT APPLICATION: **US/10/787,219** TIME: 11:40:39

Input Set : **A:\248628US0X.txt**
Output Set: **N:\CRF4\07302004\J787219.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; N Pos. 15,16,17,24,25,26
Seq#:6; N Pos. 17,18,19,20,21,22,26,27,28,44,45,46
Seq#:7; N Pos. 17,18,19,32,33,34,41,42,43
Seq#:8; N Pos. 14,15,16,23,24,25
Seq#:9; N Pos. 20,21,22,38,39,40,44,45,46,47,48,49
Seq#:10; N Pos. 20,21,22,29,30,31,44,45,46
Seq#:11; N Pos. 19,20,21,28,29,30

VERIFICATION SUMMARY DATE: 07/30/2004
PATENT APPLICATION: **US/10/787,219** TIME: 11:40:39

Input Set : **A:\248628US0X.txt**
Output Set: **N:\CRF4\07302004\J787219.raw**

L:113 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:198 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:267 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:318 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:403 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:472 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:528 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0